

Business Systems Modernization

New strategy will ensure that DLA achieves its Logistics Transformation

As we approach the 21st century, DLA's existing logistics systems —such as the Standard Automated Materiel Management System (SAMMS)—need to follow a new blueprint—one that matches new information technology with the organizational structures, concepts, and business practices needed to successfully attain DLA's strategic goals. This new blueprint is DLA's "Business Systems Modernization" (BSM) strategy, a plan which will enable DLA to achieve not only its long-range business objectives, but also support improved military readiness, through the accessibility and velocity of logistics information—the Joint Vision 2010 concept of Focused Logistics.

The BSM strategy's first focus is to replace DLA's primary materiel management systems, SAMMS and the Defense Integrated Subsistence Management System (DISMS), with an expanded enterprise computing environment and commercial off the shelf (COTS) software packages. Although SAMMS and DISMS will be the first systems to be replaced, DLA's other legacy systems won't be far behind. The BSM strategy, over the course of several years, will result in a new agency-wide computing architecture, which will enable DLA to re-engineer its logistics processes to reflect best commercial business practices. It will also contribute to improved military readiness by implementing a more interoperable, shared data environment.

"The changing nature of customers' needs, how business is conducted today for the warfighter, and the actual needs of the warfighter mandate that we have a system that can respond to those changes. Right now we are not as agile as we need to be," said Rear Adm. Bob Chamberlin, DLA deputy director.

The Origins of SAMMS

SAMMS was established in the late 1960s and early 1970s in an age of hardware constraints, memory limitations and relatively slow processing speed. It was a time when punch cards were the media used for input and printed reports were the only available form of output. Although the system is archaic by today's technology standards, it provided an effective, efficient environment for its time.

"Although SAMMS has served DLA and the military services well for many years, it has become an outmoded system based on old business practices and obsolete technology," said Mae DeVincentis, DLA executive director for Information Systems and Technology. "Additionally, it has become increasingly expensive to operate and maintain due to excessive downtime, high operating costs, cumbersome system modification processes and poor performance."

Because of the diverse commodity management requirements at each individual Inventory Control Point (ICP), the system evolved to consist of six ICP-specific versions. The system, which is programmed in COBOL with a myriad of non-database files, was further divided to provide six functional subsystems to support asset management, requirements determination, acquisition management, technical, logistics, and financial management.

In an age where relational databases and decision support environments allow users cost effective, quick turn-around information, DLA's analysis found that SAMMS will not enable us to meet the future needs of the DLA work force, military services and the warfighting commanders-in-chief.

This latest DLA effort to eliminate outdated or legacy systems is consistent with other Agency initiatives to better manage the information that effective logistics operating depends on. In December 1991, DLA was assigned the responsibility for managing DoD's wholesale supply distribution system, which included the military services' supply depots. It soon became apparent that the variety of computer systems supporting the depots had to be replaced with a single

system. Hence, DLA developed the DoD Distribution System. DSS became fully operation at the end of September 1998. The system, which currently supports 20 distribution depots, replaced seven redundant systems and has resulted in life-cycle benefits projected at \$500 million through fiscal 2008.

In March 1996, the Secretary of Defense's Report to the President and the Congress called DSS "the flagship of the logistics modernization effort in terms of management and results."

In another standardization effort, the Immediate Improvement Initiative succeeded in fielding three mid-tier applications, DPACS (DLA Pre-Award Contracting System), CTOL (Cataloging Tools On-Line) and AIMS (Automated Inventory Manager Support System), developed at individual centers, for use by all ICPs.

The BSM strategy is unlike the previous "SAMMS Modernization" efforts pursued by DLA. Historically, when a change was needed to SAMMS, the internal programming staff would make the modifications by actually changing the system code in each of the functional areas served by the system. Furthermore, analysis found the turn-around time between concept inception and deployment was far too lengthy, due to the need to write requirements in detail, write the supporting code, test the system and train the users before the Agency could go into production with any IT change.

During the 1970s and 1980s, DLA was like many other large corporations. Individuals wrote their own code and maintained their own legacy systems. However, during the early 1990s, significant changes were afoot in the software industry. Enterprise Resource Planning (ERP) systems, Supply Chain Management Systems and tailored logistics software were being marketed, deployed and critiqued.

Over the past five years, many Fortune 500 companies have worked significant improvements in the various software packages in use. Industry giants have embarked on legacy system replacement projects and have published and shared their lessons learned.

Along the way, they have also helped refine the actual code and business practices embedded in the software. As they discover better, faster and cheaper ways of doing business, they pass those business practice changes on to the software providers, who then change the supporting system to accommodate the new practices.

DLA, as a user of the software, will share in the improvements made by other users without footing the entire bill for software development, testing, training and maintenance.

The Work of the ICPs has Changed

Traditionally, ICPs accomplished their mission by ensuring adequate supplies were available for any contingency, anywhere in the world. They accomplished this by storing massive amounts of supplies in various depots located throughout the world. Throughout the Cold War, DLA took on the daunting task of ensuring readiness by stockpiling spare parts, clothing, food, medical supplies and general industrial items. In spite of the Agency's best efforts, however, critical items were often on backorder while low demand or no demand items often accumulated in our warehouses.

In the early 1990s, DLA began an aggressive campaign to change the way it did business. The Agency began shifting to commercial business practices. Prime Vendor, Vendor Express, Third Party Logistics, Virtual Prime Vendor and E-Mall all changed the nature of the business from stockpiling supplies just in case the customer needed them to having a commercial contractor store products and deliver them to the customer just when the customer needs them. In order to accomplish these shifting business practices, DLA made incremental changes in the SAMMS environment, sometimes on a daily basis.

As DLA moves further from "managing supplies" and becomes a broker of information and "manager of suppliers," the supporting systems, like SAMMS and DISMS, must change too. "It should ultimately result in significantly lowering our operating costs because our inventories will

be smaller and we will have much better information about them,” said Jeff Jones, DLA Defense Logistics Support Command deputy commander.

Our Employees Have Changed

Another change in DLA has been among the work force. Over the last 10 years, technology at the desktop has improved dramatically. Most ICP employees now have a Pentium II processor at the desktop with access to a robust suite of software.

Point and click technology has removed the burden of remembering various program function keys and combinations. Drag and drop has made editing easy; spell check and calendars ease the burden on clerical staff; and the use of e-mail hastens decisions and information exchange throughout the entire Agency. The work force is sophisticated in their understanding and familiarity with desktop technology, bringing a competency that positions them for a new, more sophisticated enterprise wide system.

SAMMS Hasn't Changed

While others have moved out to adopt commercial off the shelf software and best business practices, DLA has cautiously taken a “wait and see” posture. During that time SAMMS has continued to grow old and frail. As the Year 2000 approaches, the Agency has worked diligently to ensure all date sensitive code is Y2K compliant.

But the system is much older than other legacy systems in use in private industry. To change SAMMS to a database management system that operates in a flexible, efficient manner would cost millions of dollars and take years. And DLA would still be left with a legacy system that only the Agency uses, putting the entire cost of development, testing and maintenance on DLA and its customers.

“Continuing to make incremental changes to SAMMS would improve the system but wouldn’t bring about the core changes in business practices that are necessary,” said Chamberlin. “Only a fundamental change in the way we do business, coupled with a suite of software that supports those changes, can keep DLA competitive, relevant and strong into the next century.”

Business Systems Modernization:

The road to developing a strategy

*by Vicki Christensen
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Last July, the Defense Logistics Agency formed the Business Systems Modernization Steering Group, consisting of senior leaders from the field, Defense Logistics Support Command, and Headquarters DLA and chaired by the DLA Deputy Director Rear Adm. Bob Chamberlin.

The steering group, with the help of KPMG LLP, spent several months considering alternative solutions to the question of how to proceed with enterprise-wide information technology.

In view of its focus on implementing best commercial practices, the steering group has elected to base its business systems modernization information technology solution set on Commercial Off The Shelf products.

“We’re bringing in business processes and system support that have been tried and proven in the competitive environment,” said Jeff Jones, DLSC deputy commander. “The marketplace has built these systems for competitive purposes, and that’s the key ingredient that we’re going to have with the system.”

The products are available from General Services Administration Information Technology schedules through competitive government acquisitions. Both the products and the associated services will be purchased, to the maximum extent advantageous, by using the schedules as

acquisition instruments. Specific licensing and implementation requirements will be specified in negotiated task/work orders against the schedules.

“We’re not trying to define in great technical detail what our requirements are and then build that system from spec,” said Jones. “We’re basically taking what somebody else’s experience has found, and we’re importing that into DLA. It’s completely the reverse process from what we’re used to doing.”

The Road Ahead

It is anticipated that by fiscal 2005, DLA will make significant strides in replacing all of its major mission-critical legacy business applications with commercial alternatives.

Using the commercial systems, combined with a move to commercial practices, should result in efficiency that is noticeable to both customers and employees. For instance, at Defense Supply Center Richmond, the new system will help eliminate many manual processes.

“Today a customer sends me an order and if I don’t think it’s coded properly, the first thing I do in many cases is to reject that order back to the customer,” said Frank Lotts, DSCR deputy commander. “With today’s technology, I can now go into an interactive mode with the customer to make sure the order is correct.”

Employees should also see the same kinds of improvements.

“I think they’re going to be astounded,” said Carla von Bernewitz, DLA chief information officer. “They will see more seamless business processes across our commodities than we can possibly manage today. We will be able to give them more information to help them do their jobs.”

George Allen, Defense Supply Center Philadelphia deputy commander agreed.

“You’ll provide enough information at the desktop so that the employee can make rational decisions on a variety of functional specialties,” he said. “We will broaden the scope of work performed by every individual employee, and we’ll probably raise the caliber of employees who work with us over the long term.”

In moving DLA toward the future, the DLSC vision is to be a virtual logistics enterprise, consisting of several geographically separate, but operationally joined, centers that manage relationships with suppliers. Lead Centers have been designated based on the type of items managed. These Centers manage inventory, foster industry partnerships and support appropriate item methodologies within the virtual logistics enterprise. These visions can only be achieved by the application of modern information technology across the Agency.

IT will serve as the vehicle to provide the required visibility into global inventories and manufacturing capabilities, while increasing the speed and effectiveness of communications and facilitating the integration between supplies and customers.

Ultimately, this BSM strategy will result in a new corporate computing architecture which will enable DLA to reengineer its logistics processes to reflect best commercial business practices. Above all, the BSM initiative demonstrates DLA’s commitment to the Department of Defense to significantly improve the IT position for the entire warfighter community.

“World class performance is the goal,” said Jones, “and that’s what we’ll deliver.”